MANAGEMENT PLAN FOR RECLAMATION OF THE JACKPILE-PAGUATE MINE

OCTOBER, 1986

MANAGEMENT OF THE
JACKPILE-PAGUATE RECLAMATION PROJECT
BY THE
PUEBLO OF LAGUNA

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1.0 SUMMARY

The Pueblo's plan for management of the Jackpile-Paguate Reclamation Project consists of establishing a Laguna construction firm and contracting with established firms to work closely with the Laguna construction firm and provide the necessary technical and managerial assistance. The Pueblo will contract with an engineering firm to prepare detailed engineering designs and detailed project operating plans during Phase 1 of the project. The Pueblo will also contract with a firm for construction management of the reclamation operations. The construction management contractor will have overall responsibility for the completion of the reclamation operations. The reclamation activities will be performed by members of the Pueblo employed by the Laguna construction firm but under the direction of the contractor. As the Laguna construction firm gains experience, it will assume many of the responsibilities of the contractor.

The technical assistance contractor will operate a comprehensive computer-generated cost and schedule control program to closely monitor costs and schedules and any variances from project plans. The investment and control of the reclamation settlement funds will be under the direct supervision of the Laguna Tribal Council or its designee. The U.S. Department of Interior will provide oversight over all aspects of the project.

2.0 INTRODUCTION

2.1 PROJECT OVERVIEW

The management of the Jackpile-Paguate Project by the Pueblo of Laguna will be very similar to the management of any large earth-moving project with the following exceptions.

Firstly, the project will be operating under a fixed budget which must be sufficient to fully reclaim the mine site. Many companies undertaking a major project can accept an element of financial risk on any one project because they can, and expect to, cover some financial losses by making a profit on other projects. This is not the case for the Pueblo on the Jackpile-Paguate Project. The Pueblo must be able to complete the project with the reclamation funds available. Therefore, careful attention must be given to the initial planning activities and financial management.

Secondly, most organizations undertaking a major project have, within their own structures, a level of technical expertise sufficient to adequately monitor the project. The Pueblo does have expertise within its structure in the fields of legal affairs and financial and administrative management and does have laborers skilled in construction activities; however, the Pueblo does not presently have expertise in many of the critical technical fields such as engineering, environmental management, and construction management. Therefore, the Pueblo must select technical assistance contractors to provide continuous and high quality technical support.

Thirdly, the Jackpile-Paguate Project involves some very specialized activities that are not included in most major earth-moving operations. Among these activities are the detailed blasting of highwalls, decontamination of buildings, treatment and discharge of contaminated water, environmental monitoring, comprehensive worker health and safety requirements, and working with low-level radioactive materials. These specialized activities will require a wide variety of specialized technical personnel intermittently.

Fourthly, the Jackpile-Paguate Project provides the Pueblo with some unique opportunities to develop technical and managerial expertise as well as financial resources that will enable the Pueblo to develop a construction firm capable of operating other projects with minimal support from other organizations. The Pueblo's firm will qualify as a minority business which will enable the firm to be given preferential consideration for many Federal and state projects. In this manner, the Jackpile-Paguate Project could be used as a stepping stone to a continuing source of income and employment for the Pueblo. To accomplish this, members of the Pueblo need training and experience, and the Pueblo must have the financial resources and equipment that can be obtained through careful planning of the Jackpile-Paguate Project.

In addition to these special considerations, the project would involve activities which are common to any large earth-moving project such as scraping, grading, backfilling, construction of drainage structures, placement of cover and soil, revegetation, construction management, and field supervision.

2.2 MANAGEMENT OBJECTIVES

The following objectives for the management of the reclamation operations were established.

Primary objectives

- Ensure that adequate reclamation of the mine site is performed.
- Minimize the financial risks and liability of the Pueblo.
- Maximize employment for members of the Pueblo.
- Maximize the opportunities for training members of the Pueblo to assume technical and managerial positions and responsibilities.

Secondary objectives

- Provide for maximum control over the project by the Pueblo.
- Develop the expertise and resources necessary, including financial resources, for the Pueblo to establish a construction firm capable of conducting other projects with minimal support from non-Pueblo organizations.

The primary goals identified above are goals which must be met. The secondary goals represent additional opportunities to the Pueblo but which are not absolute requirements of the management plan.

3.0 PROJECT REQUIREMENTS

3.1 PROJECT PHASES AND MAJOR TASKS

The following are the project phases and major tasks required for the project.

Interim management

Immediately upon the receipt of the settlement amount from AMC, the Pueblo will invest the funds in secure investments and make provisions for immediate and short-term expenditures that will be required before the management plan is fully implemented. The respective responsibilities and obligations of the Laguna Construction firm, technical assistance contractor, and construction management contractor will be set forth in the annual operating plan.

In addition, there are a number of technical and administrative activities that will occur immediately upon the approval of the settlement agreement. These include the following items:

- Conduct a property transfer audit of the mine site.
- Review all AMC technical files related to the project, categorize the data, and place the data in short-term storage.

- o Conduct a safety audit of the site, and develop a plan to prevent access to immediate safety hazards.

- o Continue the environmental monitoring program.

- o Transfer utilities to the Pueblo.

Phase 1--detailed planning and engineering

- o Contract with a technical assistance contractor (TAC).

- o Prepare detailed engineering designs.

- o Prepare operating plans for:
  - Project master plan.
  - Health and safety.
  - Environmental monitoring.
  - Project integration and control plan.
  - Regulatory compliance.
  - Personnel management.
  - Laguna training program.
  - First-year operating plan.

- o Perform interim management of the mine site:
  - Provide for site security.
  - Collect environmental data.

- Manage reclamation fund.

- Collect additional environmental and engineering data.

Phase 2--mobilization and site preparation

- Contract with a construction management contractor (CMC).
- Retrofit utilities.
- Purchase operating equipment (excluding heavy construction equipment).
- Retrofit office, shop, and employee change room.
- Treat and discharge pit water.
- Fence mine site.
- Repair roads and erosion control structures.
- Provide overall project management.
- Collect environmental data.
- Lease or purchase major construction equipment.
- Implement plans prepared in Phase 1.
- Manage reclamation fund.

Phase 3--operations

- Backfill pits.
- Slope highwalls.
- Slope waste piles.
- Remove contaminated soils.

- o Place cover and soil.
- o Recontour site to provide drainage.
- o Plug vent holes, decline, and adits.
- o Plug drill holes.
- o Guard mine site.
- o Provide field supervision.
- o Provide overall project management.
- o Collect and analyze environmental data.
- o Maintain equipment.
- o Provide quality assurance and control.
- o Manage the reclamation fund.

Phase 4--decommissioning

- o Remove/decontaminate buildings.
- o Collect and analyze environmental data.
- o Replace vegetation.
- o Repair the impacts of erosion.
- o Prepare closure report.
- o Construct internal fencing.
- o Provide field supervision.
- o Provide overall project management.
- o Manage reclamation fund.

Phase 5--revegetation monitoring and replacement

- o Collect and analyze environmental data.
- o Replace vegetation.
- o Repair the impacts of erosion.
- o Provide overall project management.
- o Manage reclamation fund.

Phase 6--post-reclamation monitoring and maintenance

- o Conduct yearly site monitoring.
- o Perform site maintenance including:
  - Replacement of vegetation
  - Recontouring of eroded areas
  - Replacement of rock erosion protection
  - Scaling of unstable highwalls
- o Conduct grazing management program.
- o Manage monitoring and maintenance fund.

3.2 PERSONNEL

The types and number of personnel required depend on the phase of the project and the rate at which reclamation is conducted. Appendix A

contains a list of the types of personnel required for each phase subject to the approved yearly operating plan.

During Phase 1, Detailed Planning and Engineering, there will be a heavy dependence on civil and environmental engineers and their support staffs of draftsmen, accountants, secretaries, and clerks. A project manager, financial manager, and environmental manager as well as mine security guards will also be required.

During Phase 2, Mobilization and Site Preparation, there will be a reduced need for engineers and a greater need for field supervisors, contract specialists, project control personnel, and skilled and unskilled laborers. A project manager, financial manager, construction superintendent, and environmental manager will also be required during this phase. Beginning with this phase, all project personnel should be located on the site.

During Phase 3, Operations, there will be a much greater need for field supervisors and skilled and unskilled laborers as well as project control and accounting specialists. Skilled laborers required include truck drivers, front-end loader operators, scraper operators, mechanics, land surveyors, electricians, and carpenters. A number of unskilled laborers will be required to support the efforts of the construction management and skilled laborers. Specialized expertise will be required during this phase on an intermittent basis. This includes structural engineers, blasting design specialists, field inspectors, health physicists, and others. The vast majority of the man-hours spent on the project will be incurred during this phase.

During Phase 4, Decommissioning, the number of personnel required will decrease significantly. The majority of the personnel required will be field supervisors and skilled and unskilled laborers. The number of technical and management personnel will decrease significantly.

During Phase 5, Revegetation Monitoring and Replacement, all personnel will be part-time only with the exception of one field supervisor. Personnel will be required intermittently for environmental monitoring, repair of erosion impacts, and replacement of vegetation.

During Phase 6, Post-Reclamation Monitoring, personnel will be required periodically to inspect the site and for approximately six months once each five years. The personnel required will primarily be field supervisors and skilled and unskilled laborers. Upon BIA determination that the conditions of the Record of Decision and the Environmental Impact Statement have been met, it may terminate the cooperative agreement and release any claims it may have to the reclamation fund.

4.0 MANAGEMENT PLAN

The Pueblo's plan for managing the Jackpile-Paguate Project has four major components; financial management, contracting for technical assistance, contracting for construction management, and establishing a Laguna construction firm.

The Pueblo will contract with a technical assistance contractor (TAC) for the preparation of detailed engineering designs and project operating plans. The TAC will assist the Pueblo in forming a construction company and will perform all nonconstruction tasks during reclamation operations.

The Pueblo will contract with a construction management contractor (CMC) who will be responsible for completing the reclamation operations and directing field activities.

The Laguna construction firm (LCF) will be established and will perform virtually all of the reclamation field tasks under contract to the CMC.

Additional information on these management components is contained in the following sections.

Figure 1 shows a preliminary schedule for the completion of the project. A detailed schedule for each reclamation activity will be prepared during the preparation of detailed engineering designs.

PRELIMINARY SCHEDULE

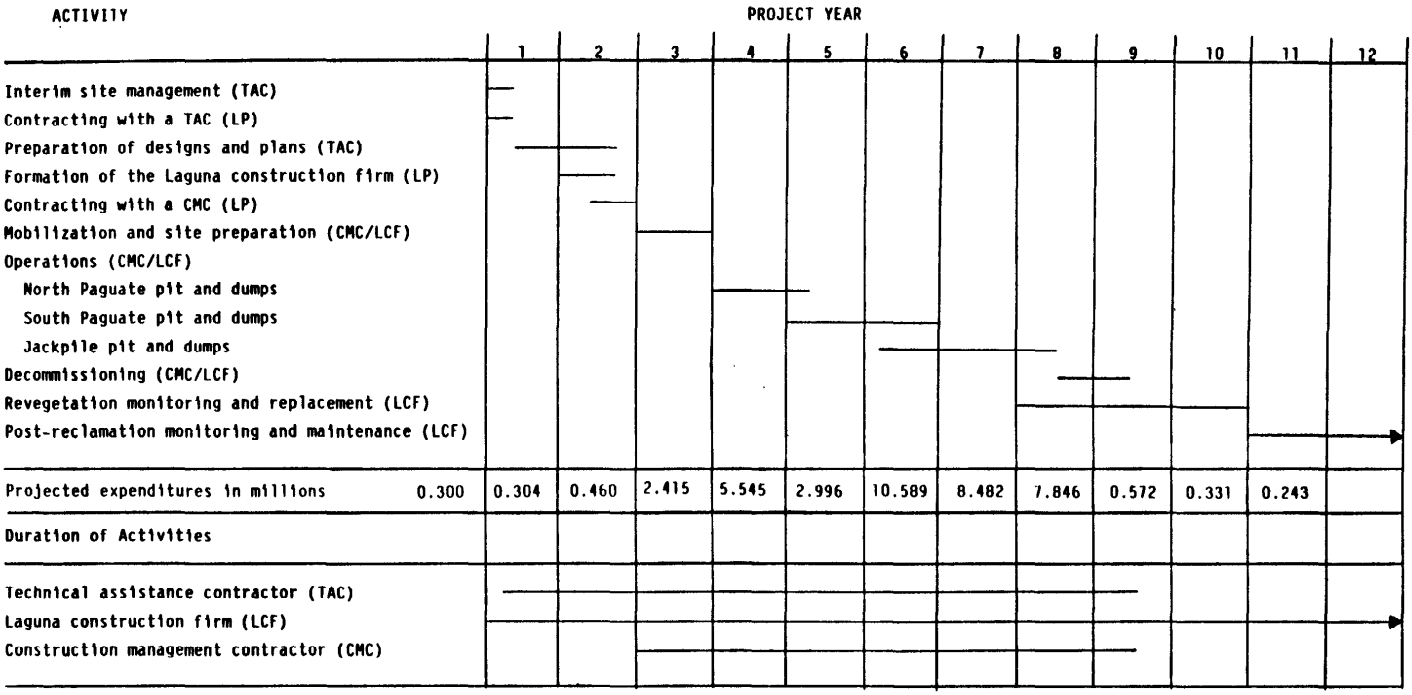

Figure 1

4.1 DISBURSEMENTS

The settlement funds will be used for activities directly associated with reclamation operations. A total of $300,000 will be withdrawn from the settlement fund during the first year of the project for compensation to the residents of Paguate subject to the approval of a disbursement plan by the contracting officer.

The Pueblo anticipates adopting a disbursement procedure substantially as follows:

The contractor (TAC and CMC) will assemble invoices for payroll and purchases monthly and will prepare a disbursement request for submittal to the Pueblo's fiscal officer and the custodial bank. The fiscal officer will compare the invoice to the budget in the approved yearly operating plan and will prepare and provide the custodial bank with a disbursement approval if the request is within the "reporting threshold." If the disbursement request exceeds the reporting threshold the fiscal officer will not approve the disbursement until the Pueblo and BIA have approved the disbursement. The reporting threshold will be 10 percent above or below the yearly operating budget or 20 percent above or below the quarterly operating budget. The Pueblo and BIA must approve any disbursements which exceed this threshold. The Pueblo and BIA will respond to any disbursement requests which exceed the threshold within five working days of receipt or the disbursement will be automatically approved.

Once the disbursement request has been approved, the custodial bank will release the approved funds to the contractor. The contractor will disburse the funds and submit a certification of payment to the fiscal officer.

The financial manager will prepare a quarterly report of the investment program and expenditures for submittal to the Pueblo and the BIA.

The construction management contractor will transmit the disbursement certification to the cost and schedule control manager for use in the preparation of monthly cost and schedule variance reports. These reports will be submitted to the Pueblo and BIA.

The Pueblo will audit all project accounts yearly and will provide a copy of the audit to BIA. The BIA will audit the accounts as deemed necessary by the Secretary of the Interior.

4.2 CONTRACTING WITH A TECHNICAL ASSISTANCE CONTRACTOR (TAC)

The Pueblo will contract with a technical assistance contractor (TAC) to prepare detailed engineering designs and the detailed operating plans necessary to conduct and manage the reclamation operations. The TAC will also implement the cost and schedule control program and the environmental monitoring, regulatory compliance, and Laguna training programs. The TAC will report to the Pueblo (Figure 2). Detailed information on the Laguna training program is provided in Secton 4.4.

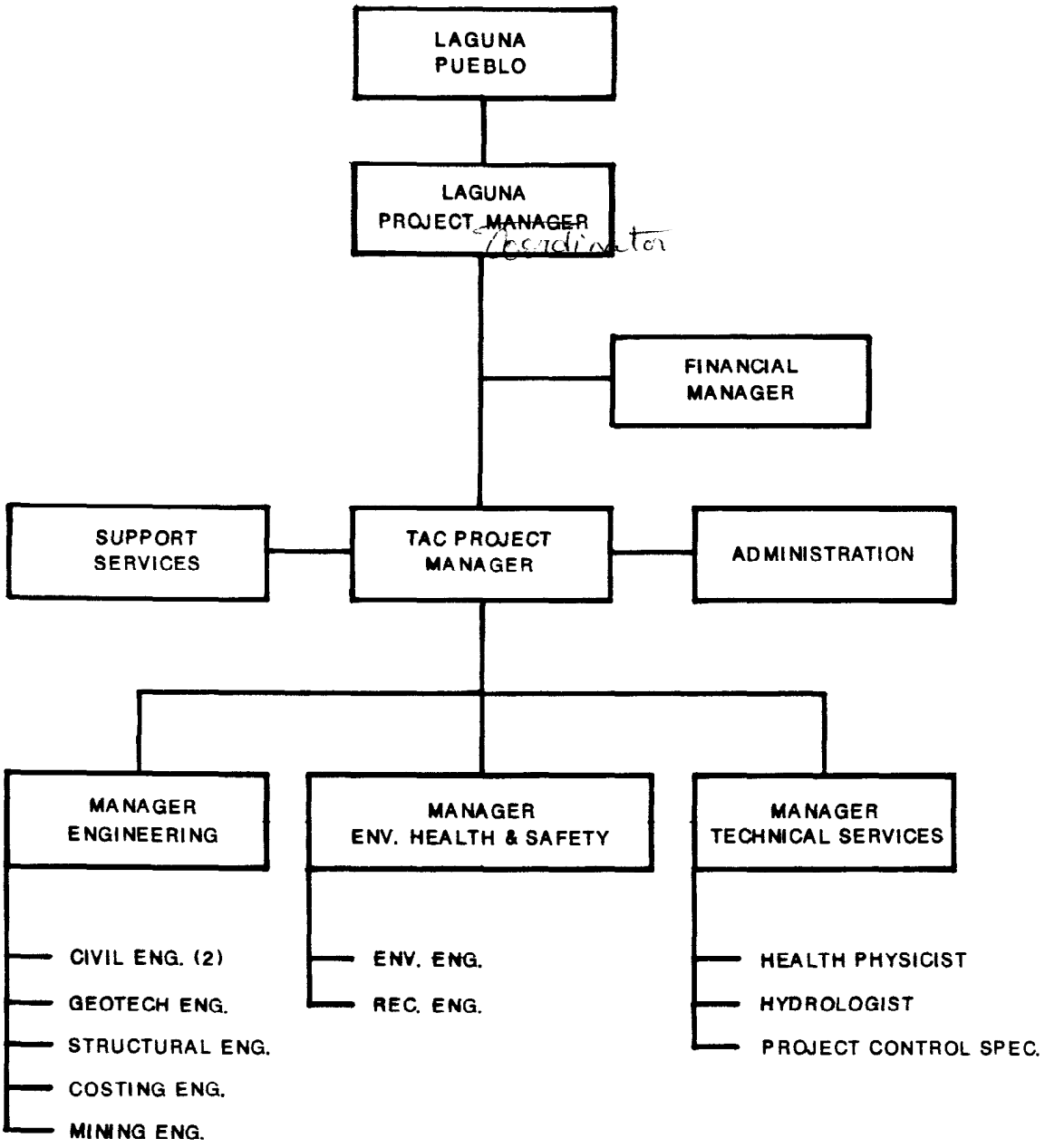

FIGURE 2 ORGANIZATION CHART
PHASE 1

The TAC selected by the Pueblo must be able to demonstrate expertise in the following areas:

- o Preparing engineering designs for major earth-moving projects.
- o Reclamation of low-level radioactive waste sites.
- o Preparing mine reclamation plans.
- o Managing major construction projects.
- o Providing project management and planning for major construction projects.
- o Operating a computer-generated cost and schedule control program.

The Pueblo will solicit proposals from qualified engineering/design contractors and will select the firm that best suits the project requirements. The BIA will review and approve the selection of the contractor. The TAC will provide the Pueblo, BIA, and financial manager with a schedule of costs for the TAC contract for use in planning the long-term investment program.

The TAC will be responsible for completing the following tasks:

- o Preparing detailed engineering designs, costs, and schedules.

- o Preparing the following detailed operating plans:
  - Project master plan
  - Health and safety plan
  - Laguna training plan
  - Personnel management plan
  - Project integration, control, and procurement plan

Regulatory compliance plan

Environmental monitoring plan

First-year operating plan

- Providing overall guidance and assistance to the Laguna construction firm in establishing and operating the construction firm.

- Implementing the cost and schedule control program and the environmental monitoring, regulatory compliance, and Laguna training programs during reclamation operations.

The TAC will prepare detailed engineering designs and specifications for all activities associated with the reclamation operations. The designs will conform to the Laguna Plan for Reclamation of the Jackpile-Paguate Mine, the Jackpile-Paguate Uranium Mine Reclamation Project, the Environmental Impact Statement preferred alternative, and the Record of Decision. Any deviation from these documents must be submitted to the Pueblo and the BIA for approval.

The TAC will hold review meetings with the Pueblo and BIA at the initial contract award and the 30-percent design stage. Comments will be incorporated into the design. The TAC will submit designs and specifications at the 60-percent design stage and will hold review meetings. Written comments will be solicited. At the 90-percent design stage completed designs and specifications will be submitted for review. Extensive review meetings will be held and written comments solicited. Any comments not addressed in the completed designs will be responded to

in writing and will become attachments to the completed designs. The 100-percent designs will be submitted for Pueblo and BIA approval.

After completion of the 90-percent design review, the TAC will prepare a detailed cost estimate and schedule for all reclamation activities. The reclamation activities will be divided into work packages that will be effectively assigned to the construction management contractor and to the Laguna construction firm with the approval of the Laguna project manager. The cost estimate and schedule will be submitted to the Pueblo and BIA with the 100-percent design for review and approval.

All project operating plans will be prepared in draft form and submitted to the Pueblo and BIA for review and comment. Any comments not incorporated in the final operating plans will be responded to in writing. Final reports will be submitted for Pueblo and BIA approval. Appendix B contains a list of the topics that will be addressed in the project operating plans.

The TAC will provide guidance to the Pueblo in establishing the Laguna construction firm, including guidance for position descriptions and qualifications, standard operating procedures, employment projections, and construction techniques.

The TAC will operate a computer-generated cost and schedule control program. The costs and schedule from the project master plan will be inserted into the system as the project "baseline." The costs and schedule from the yearly operating plan will be inserted as the "working schedule." The disbursement certification and field progress reports

will be inserted into the system monthly. Monthly cost and schedule variance reports will be generated and provided to the CMC and LCF project managers for management action (as necessary). Informational copies of the cost and schedule variance report will be transmitted to the BIA. The cost and schedule control system will also be used to generate the data for the yearly operating plan.

The TAC will also be reponsible for completing the "level of effort" activities typically associated with construction management such as implementing the Laguna training program, environmental monitoring plan, and regulatory compliance plan.

4.3 CONTRACTING WITH A CONSTRUCTION MANAGEMENT CONTRACTOR (CMC)

Following the completion of engineering designs and project operating plans, the Pueblo will contract with a construction management contractor (CMC). The CMC will be responsible for ensuring that the reclamation operations are completed and will report to the Pueblo (Figure 3).

The CMC selected must be able to demonstrate extensive expertise in the following areas:

- Construction management of major earth-moving projects.

- Reclamation of low-level radioactive wastes.

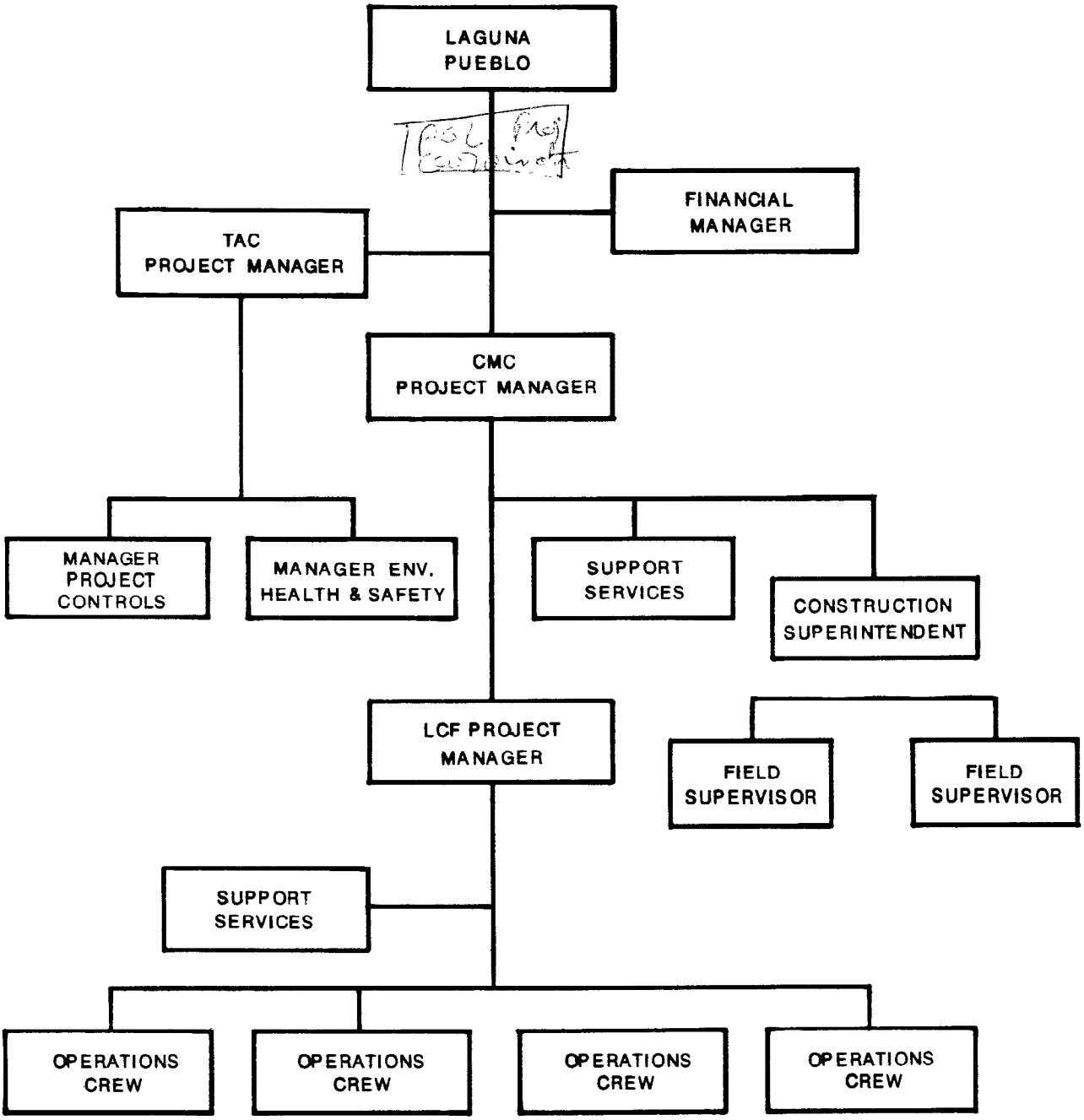

FIGURE 3 ORGANIZATION CHART

PHASES 2 THROUGH 5

The Pueblo will solicit proposals from various construction management contractors and will select the firm that best suits the project requirements. The BIA will review and approve the selection of the contractor.

The CMC will provide the services typically associated with construction management of an earth moving project and numerous services that are not typically associated with this type of project. The primary responsibilities of the CMC will be the following:

- Prepare yearly construction operating plan for the approval of the Pueblo and BIA.
- Obtain the necessary major earth moving equipment.
- Monitor all costs, procurements, wages, and salaries.
- Prepare required reports for submission to the Pueblo and BIA.
- Monitor and supervise field activities of the LCF.
- Implement the health and safety program.
- Provide the managerial and technical expertise required to complete the project.
- Provide the expertise for the performance of the specialized technical tasks that the LCF does not employ.

The CMC will furnish a performance and payment bond to the Pueblo for all activities associated with reclamation operations. The bond will be furnished every year and will be in the amount equal to the cost of all work packages to be completed within the year covered by the bond.

The CMC will have a project manager as its senior operating officer. The project manager will be assisted by a construction superintendent and field supervisors.

The CMC will prepare yearly operating plans for submission to the Pueblo and the BIA (Figure 4). The operating plan will contain a description of the tasks completed during the previous year and the costs associated with the tasks. The plan will contain a cost and schedule variance analysis (prepared by the TAC) for the previous year and projections of the "at completion" costs and schedule variance. The costs and schedule will be compared to the "baseline" costs and schedule in the project master plan. The plan will also contain a description of the tasks planned for the following year and the schedule and budget associated with these tasks. The Pueblo will submit the yearly operating plan to the BIA for approval no less than 60 days prior to the anniversary date of the commencement of reclamation. If the BIA does not respond with a description of areas of concern and additional information needs within 30 days of receipt, the yearly operating plan will be automatically approved.

The CMC will prepare detailed work packages for all tasks associated with reclamation activities. All work packages must conform with the approved detailed engineering designs and project operating plans. The

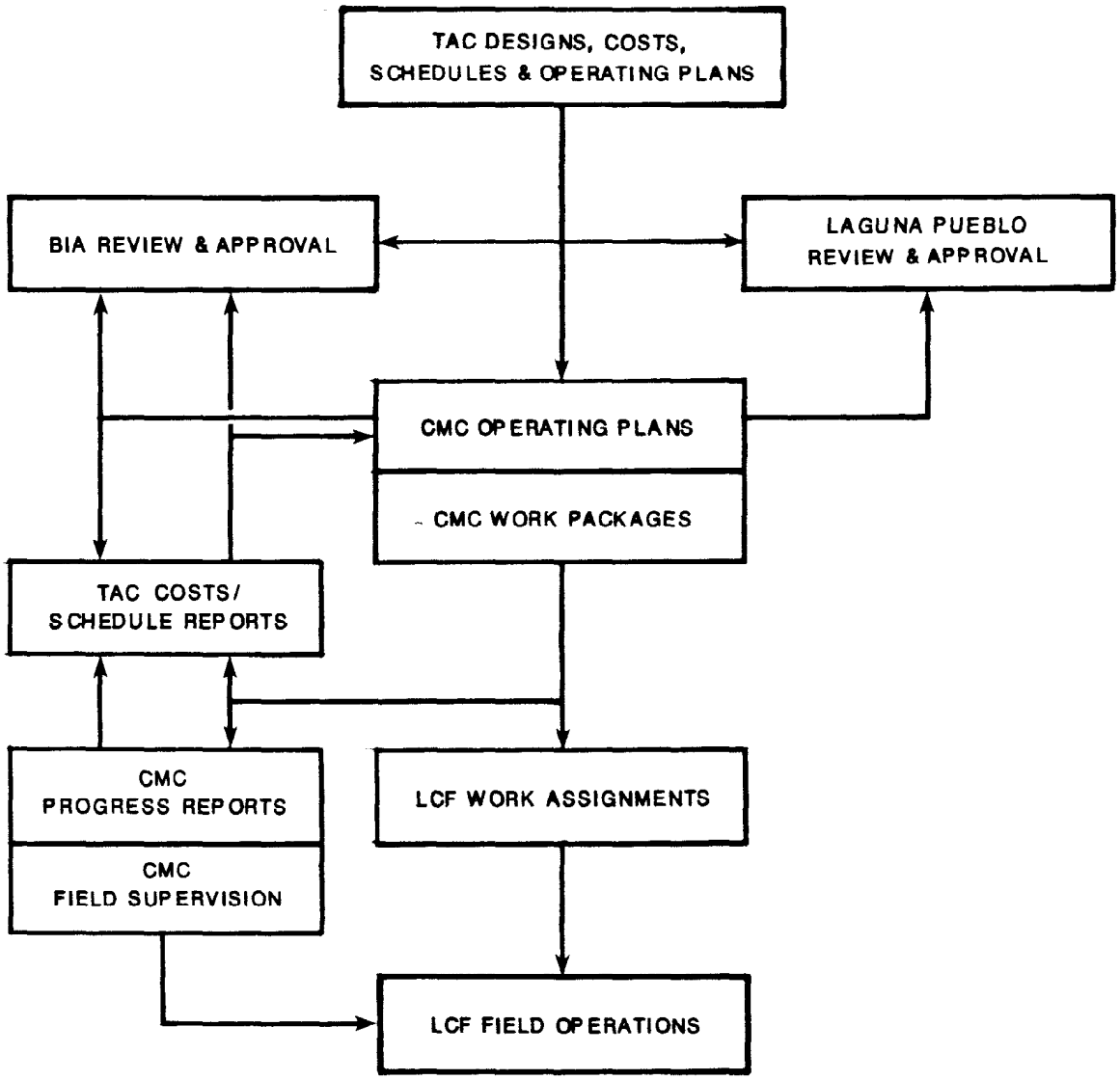

FIGURE 4 WORK PLAN

PHASES 2 THROUGH 5

work packages will contain a detailed description of the work to be performed, procedures to be followed, schedule for completion, and an estimated budget. The work packages to be performed by the LCF will be transmitted to the LCF project manager who will assign them to LCF crew chiefs. CMC field supervisors will monitor the field activities and provide direction on technical issues to assist the crew chiefs in the proper completion of the work package.

The CMC field supervisors will prepare monthly reports describing the progress of each work package for submission to the project manager and the TAC manager of project controls. These reports will be used to generate the monthly cost and schedule control reports.

The CMC will also be responsible for two tasks that are not typically associated with construction management: obtaining the necessary major earth moving equipment and assisting in the implementation of the Laguna training program. Section 4.4 contains information on implementing the Laguna training program. The procedure to be followed for obtaining equipment will be contained in the proposals submitted by the potential CMC. The contractor selected will be responsible for obtaining the equipment consistent with the contract between the Pueblo and the CMC.

4.4 ESTABLISHING THE LAGUNA CONSTRUCTION FIRM

The Pueblo will establish and incorporate a Laguna construction firm (LCF) which will be responsible for performing the reclamation field

activities. The TAC will assist the Pueblo in establishing this firm and developing operating procedures.

The LCF will be composed almost exclusively of members of the Pueblo. The LCF will operate under a contract with the CMC. The contract will specify the working relationship between the LCF and the CMC, the financial relationship, work packages to be performed by the LCF, and the procedures for training LCF employees to assume work packages being performed by the CMC.

The LCF will furnish a performance bond to the CMC for all work packages assigned to the LCF in the yearly operating plan. The LCF will operate under a right to work order and will establish wage rates for all LCF personnel.

The LCF project manager and his staff will be responsible for receiving all project operating plans and yearly operating plans. The project manager will receive and review work packages from the CMC. The work packages will contain a detailed description of the work to be performed, procedures to be followed, schedule for completion, and an budget. The LCF project manager will be responsible for hiring LCF personnel, monitoring and assembling invoices, payroll, controlling inventories and making LCF work assignments. The LCF project manager will submit payroll requests semi-monthly and procurement invoices monthly to the CMC.

The LCF will perform most field tasks associated with reclamation with the exception of some very specialized technical tasks. The LCF

will be organized into operations crews and will be supervised by a crew chief (Figure 3). Examples of operations crews include backfilling (loading, hauling, and spreading), maintenance, dump sloping, field services, and demolition. Crew chiefs will report to the LCF project manager who will provide the crew chiefs with detailed work assignments weekly. Field supervisors from the CMC will monitor the crew activities and will provide direction on technical issues to assist the crew chiefs in proper completion of the work package. Work packages which the LCF is not qualified to complete will be completed by the CMC.

Field tasks which will be performed by the LCF include the following:

- o Fence mine site.
- o Repair roads and erosion control structures.
- o Backfill pits.
- o Slope highwalls.
- o Slope waste piles.
- o Remove contaminated soils.
- o Place cover and soil.
- o Recontour site to provide drainage.
- o Plug vent holes, decline, and adits.
- o Plug drill holes.
- o Guard mine site.
- o Provide some field supervision.
- o Maintain equipment.
- o Remove/decontaminate buildings.
- o Replace vegetation.
- o Repair the impacts of erosion.

- o Prepare closure report.
- o Construct internal fencing.

The TAC will be responsible for training LCF employees to assume technical and managerial tasks being performed by the CMC. Specific tasks will be targeted in the Laguna training plan and by the LCF project manager. An appropriate training program will be implemented. When the TAC and the CMC project managers agree that a task can be transferred in its entirety to the LCF, the contract between the TAC or CMC and the LCF will be modified with the approval of the BIA. The modification will describe the task, schedule and costs associated with the transfer, and the level of oversight of the task that will be performed. Among the tasks that may be transferred to the LCF are:

- o Implement Laguna training program.
- o Prepare yearly operations plans.
- o Supervise all the field activities.
- o Implement worker health and safety plan.
- o Conduct specialized construction operations (detailed blasting, water treatment and discharge).
- o Monitor project progress versus expenditures and provide monthly reports to the Laguna construction firm.
- o Supervise project expenditures (payroll, insurance, purchasing, etc.).
- o Collect environmental monitoring data.
- o Perform regulatory compliance requirements.
- o Provide interface with the Tribal Council on technical issues.

- o Prepare yearly updates of yearly operations plans.
- o Monitor the success of reclamation.

The TAC will implement and manage the training program, but training for specific positions will be performed by both the TAC and CMC. The CMC will train employees of the LCF to perform specialized construction operations and to perform field supervisory activities. The TAC will train employees of the LCF to perform non-construction activities including the collection of environmental monitoring data, preparation of design modifications and operation of the cost and schedule control system.

5.0 PROJECT OVERSIGHT

As described in Section 4.0, the Pueblo of Laguna and BIA will have oversight responsibilities for the project. The Pueblo will select, subject to BIA approval, all contractors, financial managers, and the investment plan. The Pueblo will submit to the BIA for approval all project operating plans and yearly operating plans. The Pueblo will receive cost and schedule reports, and will perform an annual audit of all accounts. The BIA will review the yearly audit of all accounts. The following pages describe the administrative, financial, and technical oversight that will be performed by the Pueblo and the BIA.

5.1 ADMINISTRATIVE OVERSIGHT

BIA

- Approval of the selection of the TAC.
- Approval of the selection of the CMC.
- Approval of the Laguna Pueblo Management Plan.
- Approval of the settlement agreement.
- Approval of bonding by the CMC for all reclamation operations.

- Approval of bonding by the TAC for the preparation of engineering designs and detailed operating plans.

- Issuance of contract between the Laguna Pueblo and BIA for management, coordination, and administration of the project.

- Approval of all project operating plans and yearly operating plans (within 30 days of receipt of the plan).

- Approval of any modifications to the management plan, project operating plans, or yearly operating plans.

- Approval of key personnel.

- Approval of all designs and specifications.

Laguna Pueblo

- Selection of the TAC.

- Selection of the CMC.

- Approval of the management plan.

- Approval of the settlement agreement.

- Approval of the project operating plans and yearly operating plans.

- Approval of any modification to the project operating plans and yearly operating plans.

- Approval of all designs and specifications.

5.2 TECHNICAL OVERSIGHT

BIA/BLM

- Selection of the preferred alternative.

- Approval of the Laguna Reclamation Plan.

- Approval of the detailed engineering designs.

- Approval of the project operating plans.

- Approval of any modifications to the detailed engineering designs and project operating plans.

- Routine inspections of the reclamation operations.

Laguna Pueblo

- The Laguna Pueblo, at its discretion, may contract for a technical audit of the reclamation operations.

APPENDIX A

JACKPILE-PAGUATE RECLAMATION PROJECT

SUMMARY OF PERSONNEL REQUIREMENTS

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A.1 INTRODUCTION

Table A.1 identifies the primary expertise and number of personnel required to complete reclamation of the Jackpile-Paguate Mine. The number of construction personnel required will depend on the rate at which reclamation is performed.

During Phase 1, Engineering and Detailed Planning, the project will require extensive support from engineers, environmental specialists, and administrators to prepare detailed engineering designs, health and safety plans, personnel management plans, environmental and regulatory compliance plans, and operating plans. This phase will require part-time support from a wide variety of experts.

During Phase 2, Mobilization, and Phase 3, Construction, the emphasis on personnel will shift to construction personnel (truck drivers, equipment operators, etc.) and managers. During this phase, a Laguna training program will be implemented to train members of the Pueblo to assume most, and perhaps all, managerial and technical positions.

During Phase 4, Decommissioning, there will be a reduced need for management personnel as the project nears completion. Most personnel during this phase will be in the construction sector.

During Phase 5, Revegetation Monitoring, the project will require only part-time personnel to monitor the site and repair any damage done to the site by natural events.

Table A.1 also identifies whether the required personnel will be full-time or part-time employees. Many of the engineers and specialists required for the project will be needed for only a short time during the preparation of engineering designs or intermittently (a few weeks per year) during construction activities.

A brief description of the requirements of the key project positions is provided in Section A.2.

Table A.1 Summary of personnel requirements

Personnel	Number required	Full-time (FT) or part-time (PT)	Primary phases required
*Laguna Project Manager	1	FT	1,2,3,4,5
Project Manager	1	FT	1,2,3
Manager, Engineering	1	FT	1,2
**Manager, Environment & Safety	1	FT	1,2,3,4
**Civil Engineer	2	FT	1,2,3,4
**Reclamation Engineer	1	FT	1,3,4,5
**Manager, Project Controls	1	FT	1,2,3
*Contract Specialist	1	PT	1,2,3
*Office Manager	1	FT	2,3,4
**Safety Engineer	1	PT	2,3,4
*Accounting Clerk	1	FT	2,3,4
*Secretary	1	FT	1,2,3,4,5
Structural Engineer	1	PT	1
Hydrologist	1	PT	1,2
Mining Engineer	1	PT	1
Geotechnical Engineer	1	PT	1
**Costing Engineer	1	PT	1
Health Physicist	1	PT	1
*Truck Drivers	15	FT	2,3,4,5
*Equipment Operators	25	FT	2,3,4,5
*Construction Superintendent	1	FT	3
*Field Supervisors	4	FT	2,3,4
*Maintenance Personnel	5	FT	2,3,4
*Laborers (skilled and unskilled)	15	FT	2,3,4
*Surveyors	2	FT	3,4
*Security Guards	3	FT	2,3,4

*Anticipated Laguna positions (74)
**Anticipated Laguna positions following training (7)

A.2 REQUIREMENTS FOR KEY POSITIONS

Laguna Project Manager

This is the senior position on the project and should be filled by a member of the Pueblo of Laguna. The Laguna Project Manager should have a minimum of five to 10 years of relevant management experience and a complete knowledge of the procedures and policies of the Pueblo of Laguna. Previous management experience related to the Jackpile-Paguate Project is desirable.

Project Manager

The Project Manager should have a college degree in engineering or earth sciences and a minimum of 15 years of experience with at least 10 years of experience managing construction operations. An advanced degree in business or management is desirable. This is the key technical position for the project.

Manager, Engineering

The Manager, Engineering, should have an advanced degree in civil or geotechnical engineering and a minimum of 10 years of experience in preparing engineering designs for major earth-moving projects.

Manager, Environment and Safety

The Manager, Environment and Safety, should have a college degree in environmental engineering or physical sciences and at least 10 years of experience with five years of management experience. A minimum of five years of experience with projects involving low-level radiation is required. An advanced degree in business management is desirable.

Construction Superintendent

This position requires a minimum of 10 years of experience in various aspects of construction. A minimum of five years in field supervision of construction activities is required.

Manager, Project Controls

This position requires a college degree in engineering or a degree in business with five years of experience in construction. A minimum of five years of experience in preparing and analyzing project budgets and schedules is required. A minimum of three years of hands-on computer experience is required.

Costing Engineer

This position will be required intermittently throughout the life of the project. The position requires a minimum of 10 years of experience in preparing cost estimates with at least five years of experience related to major earth-moving projects. A degree in engineering and project management experience is desirable.

APPENDIX B

OUTLINE FOR OPERATING PLANS

The following is a list of topics that will be addressed in the project operating plans. Additional topics may be identified as the plans are prepared.

A. PROJECT MASTER PLAN

PURPOSE

PROJECT MANAGEMENT
- ORGANIZATION
- RESPONSIBILITIES
- AUTHORITY
- DECISION DELEGATION
- CONTRACTOR INTERFACE

FINANCIAL MANAGEMENT
- PROCUREMENT
- DECISION DELEGATION
- DISBURSEMENTS
- REPORTING
- ACCOUNTING
- INSURANCE

WORK PLAN
- PREPARATION
- ASSIGNMENT/AUTHORIZATION
- SUPERVISION/MONITORING
- REPORTING
- COMPLETION CERTIFICATION

QUALITY ASSURANCE

B. HEALTH AND SAFETY PLAN

CONTRACTOR SAFETY POLICY
REGULATIONS AND STANDARDS
ORGANIZATION AND RESPONSIBILITIES
INSPECTION AND ENFORCEMENT
AUDITS
FIRE PREVENTION AND PROTECTION
EXCAVATIONS AND TRENCHES
HEAVY EQUIPMENT OPERATIONS
SMOKING, EATING, AND DRINKING RESTRICTIONS
LADDERS AND SCAFFOLDS
ELECTRICAL PRECAUTIONS
TRAFFIC SAFETY
UNDERGROUND OPERATIONS
HEALTH AND SAFETY TRAINING
EMERGENCY ACTION
ACCESS CONTROL
NOTIFICATION OF OCCURRENCES
HAZARDOUS MATERIALS
ASBESTOS

RADIOLOGICAL CONTROL AND MONITORING
ENVIRONMENTAL CONTROL AND MONITORING
RECORDS AND REPORTING
SIGNS AND POSTERS

C. ENVIRONMENTAL MONITORING PLAN

PURPOSE
POLICY
REGULATIONS AND STANDARDS
GROUND WATER
SURFACE WATER
NONRADIOLOGICAL AIR PARTICULATES
RADIOLOGICAL AIR PARTICULATES
RADON/RADON FLUX
GAMMA RADIATION
SUBSIDENCE
SOILS AND VEGETATION
RANGE SURVEYS
GROUND VIBRATION
SCHEDULE
REPORTING AND RECORDKEEPING
QUALITY ASSURANCE
LABORATORY SPECIFICATIONS

D. REGULATORY COMPLIANCE AND PUBLIC INFORMATION PLAN

REGULATORY COMPLIANCE POLICY

U.S. DEPARTMENT OF INTERIOR
- PLAN APPROVALS
- PLAN MODIFICATIONS
- CLOSURE REPORT

LEGAL CITATION, AGENCY CONTACT, PROCEDURE, DATA REQUIREMENTS, AND SCHEDULE FOR PERMITS
- SECTION 404 PERMIT FOR DISCHARGE OF DREDGED OR FILL MATERIAL
- NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT
- THREATENED OR ENDANGERED SPECIES CONSULTATION PROCESS
- CULTURAL RESOURCE CLEARANCE
- SAND AND GRAVEL PERMIT
- REVOCABLE USE PERMIT
- RIGHT-OF-WAY PERMIT
- FREE USE PERMIT
- APPROVAL OF BORROW SITE EXCAVATIONS
- WATER PURCHASE CONTRACT/WATER USE PERMIT
- WATER WELL DRILLING PERMIT
- APPROVAL OF WELL SEALING AND ABANDONMENT
- APPROVAL OF WELL PLUGGING
- STATE HIGHWAY ENCROACHMENT PERMIT
- REVIEW OF TRANSPORTATION ON STATE HIGHWAYS

PUBLIC INFORMATION POLICY AND PROCEDURES

E. PROJECT INTEGRATION AND CONTROL PLAN

PURPOSE

MANAGEMENT CONTROL SYSTEM

WORK DEFINITION

WORK AUTHORIZATION

COST ACCOUNTING

SCHEDULE CONTROL

COST CONTROL

BUDGETING

PERFORMANCE MEASUREMENT

ANALYSIS AND CONTROL

PERFORMANCE REPORTING

F. PERSONNEL MANAGEMENT PLAN

CONTRACTOR POLICY

LAGUNA CONSTRUCTION POLICY

INDIAN PREFERENCE

LAGUNA PREFERENCE

RIGHT TO WORK

EMPLOYEE STANDARDS

GRIEVANCE PROCEDURES

POSITION DESCRIPTIONS

PERFORMANCE CRITERIA

PAY STRUCTURE

BENEFITS

G. LAGUNA TRAINING PROGRAM

POLICY

PURPOSE

CONTRACTUAL REQUIREMENTS

TARGET POSITIONS

SELECTION OF CANDIDATES

PROCEDURES FOR RESPONSIBILITY TRANSFERS

TRAINING PAY

CERTIFICATION

H. YEARLY OPERATING PLAN

PRECEDING YEAR
- TASKS PLANNED
- TASKS COMPLETED
- DOLLARS BUDGETED
- DOLLARS SPENT
- SCHEDULE VARIANCE
- COST VARIANCE
- AT COMPLETION COST VARIANCE
- EMPLOYMENT
- HEALTH AND SAFETY
- SPECIAL CONSIDERATIONS

PROJECTED YEAR
- TASKS PLANNED
- DOLLARS BUDGETED
- SCHEDULE
- EMPLOYMENT
- BUDGET AT COMPLETION
- SPECIAL CONSIDERATIONS

I. DETAILED ENGINEERING DESIGNS

SITE PLAN

TEMPORARY FACILITIES

EXCAVATION PLAN

SITE GRADING PLAN

SITE GRADING PLAN - CROSS SECTIONS

EARTHWORK VOLUMES

EARTHWORK SUMMARY

PERMANENT STRUCTURES

CALCULATIONS

EQUIPMENT NEEDS AND SPECIFICATIONS

CONSTRUCTION SEQUENCE

CONSTRUCTION SPECIFICATIONS

SPECIAL CONDITIONS

COSTS

SCHEDULE

WORK PACKAGES